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Tyr Gly His Thr Ala Gly Val Thr Lys Gly Asp Ile Ile Thr Val Asp
        35                  40                  45


Glu Ala Gln Thr Met Leu Thr Asn Asp Ile Thr Val Phe Glu Arg Ala
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Val Ser Gln Ala Val Ala Val Pro Leu Asn Gln Ser Gln Tyr Asp Ala
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Leu Val Ser Leu Val Phe Asn Ile Gly Gln Gly Asn Phe Lys Arg Ser
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Thr Leu Leu Lys Lys Leu Asn Lys Gln Asp Tyr Val Gly Ala Gly Asn
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Glu Phe Leu Arg Trp Thr Arg Ala Asn Gly Lys Val Leu Pro Gly Leu
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Ala Leu Leu Ala Ala Glu Thr Arg Glu Arg Lys Trp Glu Gln Gln Arg
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Gln Thr Asp Met Asn Lys Val Ala Ile His Ala Glu Glu Glu Leu Ala
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Ala Ala Arg Asp Ala Ala Ala Asp Ala Gln Arg Thr Gly Gln Arg Leu
            100   105   110

Gln His Thr Val Thr Thr Leu Gln Arg Gln Leu Ala Ser Arg Glu Thr
        115   120   125

Arg Arg Leu Ser Ala Ala Thr Ala Ile Gly Thr Asp Asp Leu Gly Gly
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Gln Pro Gly Val Leu Phe Ala Glu Leu Phe Arg Arg Ala Asp Gln Arg
145   150   155   160

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Leu Thr Asp Leu Phe Ser Arg Ser Phe Pro Glu Val Lys Lys Ile Thr
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Gly Asp Ser Leu Ser Trp Gly Glu Val Cys Tyr Leu Tyr Ser Gln Ala
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Gln His Glu Gln Lys Glu Asn Arg Leu Thr Glu Ser Arg Ile Leu Ala
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Arg Ala Asn Pro Leu Leu Val Asn Ala Val Arg Leu Gly Ile Arg Gln
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Ala Ala Gly Ser Arg Ser Tyr Asp Asp Trp Phe Gly Ser Arg Ala Asp
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Arg Phe Ala Arg Pro Gly Ser Val Ala Ser Met Phe Ser Pro Ala Ala
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Tyr Leu Thr Glu Leu Tyr Arg Glu Ala Lys Asp Leu His Pro Asp Thr
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Ser Leu Phe Arg Leu Asp Ile Arg Arg Pro Asp Leu Ala Ala Leu Ala
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Leu Ser Gln Asn Asn Met Asp Asp Glu Leu Ser Thr Leu Ser Leu Ser
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Asn Glu Leu Leu Tyr Arg Gly Ile Gly Ala Ala Glu Gly Leu Asp Asp
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Asp Ser Val Arg Glu Leu Leu Ala Gly Tyr Arg Leu Thr Gly Leu Thr
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Pro Tyr His Trp Ala Tyr Glu Ala Ala Arg Gln Ala Ile Leu Val Gln
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Asp Pro Thr Leu Met Gly Phe Ser Arg Asn Pro Asp Val Ala Gln Leu
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Met Asp Pro Ala Ser Met Leu Ala Ile Glu Ala Asp Ile Ser Pro Glu
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Leu Tyr Gln Ile Leu Ala Glu Glu Ile Thr Thr Asp Ser Tyr Glu Ala
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Leu Trp Ser Lys Asn Phe Gly Asp Met Pro Pro Ser Ser Leu Leu Ser
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Tyr Asp Ala Leu Ala Thr Phe Tyr Asp Leu Asp Tyr Asp Glu Leu Thr
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Ser Leu Leu Ser Leu Arg Leu Asp Phe Ser Asn Pro Asn Asn Glu Tyr
305   310   315   320

Tyr Ile Asn Ser Gln Leu Ser Val Val Thr Leu Asn Glu Ser Thr Gly
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Leu Ile Thr Ile His His Tyr Leu Arg Thr Leu Gly Gly Asp Ser Gln
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Gln Ile Asn Pro Glu Leu Ile Pro Tyr Gly Asp Gly Thr Tyr Leu Tyr
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Asn Phe Ser Val Val Ser Thr Ile Ser Glu Asp Ser Phe Lys Leu Gly
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Ser Leu Gly Ser Asn Ser Ser Asn Leu Tyr Ser Gly Asp Tyr Gln Leu
385   390   395   400

Gln Lys Gly Val Arg Tyr Ser Ile Pro Val Glu Ile Asp Glu Gly Lys
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Leu Asn Asp Gly Ile Thr Ile Gly Leu Ser Arg Lys Gly Gly Gly Tyr
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Tyr Ser Thr Val Asn Phe Thr Leu Ile Glu Tyr Asp Pro Ala Ile Phe
        435   440   445

Ile Leu Lys Leu Asn Lys Val Ile Arg Leu Tyr Lys Ala Thr Gly Met
        450   455   460

Thr Thr Ala Glu Ile Tyr Gln Ile Thr Asn Ile Leu Asn Asn Gly Leu
465   470   475   480

Thr Ile Asp His Ala Val Leu Ser Lys Ile Phe Leu Val Arg Tyr Leu
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Met Arg His Tyr Gln Leu Asp Val Ala Arg Ser Leu Ile Leu Cys Asn
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Gly Thr Ile Ser Asp Gln Ala Phe Ser Gly Glu Thr Gly Leu Phe Thr
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Thr Leu Phe Asn Thr Pro Pro Leu Asn Gly Gln Leu Phe Ser Ala Asp
    530   535   540

Asp Thr Pro Leu Asp Leu Arg Ser Glu Ala Pro Glu Asp Ala Phe Arg
545   550   555   560

Leu Ser Val Leu Lys Arg Ala Phe Asn Ile Ser Ala Ser Gly Leu Ser
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Thr Leu Trp Gln Leu Ala Ser Gly Asp Ser Ser Ala Gly Phe Ser Cys
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Ser Ala Asp Asn Ile Ala Ala Leu Tyr Arg Val Lys Leu Leu Ala Asp
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Ile His Asp Leu Ser Ala Gly Glu Leu Ser Met Leu Leu Ser Val Ser
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Pro Phe Ser Gly Val Ala Ala Gly Ser Leu Ser Asp Asn Glu Leu Thr
625   630   635   640

Gln Phe Leu Tyr Gln Thr Thr Thr Trp Leu Thr Glu Gln Gly Trp Thr
                645   650   655

Val Ser Asp Val Phe Leu Met Leu Thr Thr Gln Tyr Gly Thr Leu Leu
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Thr Pro Asp Ile Glu Asn Leu Leu Ala Ser Leu Arg Asn Gly Leu Ser
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Gly Arg Glu Leu Phe Pro Glu Thr Leu Pro Gly Asp Gly Ala Pro Phe
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Ile Ala Ala Ala Met Gln Leu Asp Ala Thr Asp Thr Ala Lys Ala Met
705   710   715   720

Leu Thr Trp Ala Asp Gln Leu Lys Pro Glu Gly Leu Thr Leu Thr Glu
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Phe Ile Leu Leu Val Met Asn Ala Ala Pro Asn Asp Glu Gln Ala Gly
        740   745   750

Gln Met Ala Gly Phe Cys Gln Ala Leu Trp Gln Leu Ala Leu Ile Ile
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Arg Ser Thr Gly Leu Ser Thr Arg Glu Leu Thr Leu Leu Val Ser Gln
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Pro Gly Arg Phe Arg Thr Gly Trp His His Leu Pro His Asp Leu Pro
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Ser Ala Leu Leu Ala Arg Ala Leu Ser Gln Asn Glu Gln Asp Val Thr
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Gly Ala Leu Ala Gln Val Arg Gly Ala Gly Glu Gln Asp Asn Ser Val
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Phe Thr Ser Trp Glu Glu Val Asp Gln Ala Glu Gln Trp Leu Asp Met
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Ser Glu Thr Leu Ser Ile Thr Pro Ser Gly Leu Ala Ser Leu Ile Ala
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Leu Lys Tyr Ile Asn Val Ser Asp Asp Ser Ala Pro Leu Tyr Ser Gln
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Trp Gln Val Val Ser Gly Leu Leu Gln Ala Gly Leu Lys Ser Ser Gln
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Ser Ser Ala Leu His Asp Tyr Leu Glu Glu Gly Thr Ser Ser Ala Leu
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Cys Ala Tyr Tyr Leu Arg Asn Leu Ala Pro Asn Met Val Ser Gly Arg
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Asp Asp Leu Phe Gly Tyr Leu Leu Leu Asp Asn Gln Val Ser Ala Lys
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Val Lys Thr Thr Arg Ile Ala Glu Ala Ile Ala Gly Ile Arg Leu Tyr
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Ile Asn Arg Ala Leu Asn Gly Ile Glu Leu Ser Ala Met Ala Glu Val
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Arg Gly Arg Gln Phe Phe Thr Asp Trp Asp Thr Phe Asn Lys Arg
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Tyr Ser Thr Trp Ala Gly Val Ser Glu Leu Val Tyr Tyr Pro Glu
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Asn Tyr Leu Asp Pro Thr Val Arg Ile Gly Gln Thr Gly Met Met
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Asp Thr Leu Leu Gln Ser Val Ser Gln Ser Ser Ile Asn Arg Asp
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Thr Val Glu Asp Ala Phe Lys Thr Tyr Leu Thr Thr Phe Glu Gln
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Ile Ala Asn Leu Asn Thr Val Ser Gly Tyr His Asp Asn Ala Ser
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Ala Asp Thr Glu Ala Glu Ser Thr Thr Thr Thr Gln Gln Ser Tyr
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Pro Val Ser Phe Asp Ile Thr Gly Asn Ile Ala Phe Pro Glu Thr
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Gln Gly Met His Val Thr Cys Asn Pro Leu Thr Glu Gln Leu Tyr
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Trp Asn Asp Ser Pro Leu Asp Ser Ile Asp Pro Asp Ala Ile Ala
    1700   1705   1710

Gln Tyr Asp Pro Met His Tyr Lys Val Ala Thr Phe Met Ser Tyr

```
                 1715                1720                    1725
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Leu Asp  Leu Leu Ile Ala Arg  Gly Asp Ala Ala Tyr  Arg Leu Leu
    1730             1735                 1740

Glu Arg  Asp Thr Leu Asn Glu  Ala Arg Met Trp Tyr  Val Gln Ala
    1745             1750                 1755

Leu Asn  Leu Leu Gly Asp Glu  Pro Tyr Ile Ser Phe  Asp Ala Asp
    1760             1765                 1770

Trp Ser  Ala Leu Thr Leu Gly  Asp Ala Ala Ser Glu  Val Thr Arg
    1775             1780                 1785

Arg Asp  Tyr Gln Glu Ala Leu  Leu Ala Val Arg Arg  Leu Val Pro
    1790             1795                 1800

Ala Pro  Glu Thr Arg Thr Ala  Asn Ser Leu Thr Ala  Leu Phe Leu
    1805             1810                 1815

Pro Gln  Gln Asn Glu Val Leu  Lys Gly Tyr Trp Gln  Thr Leu Ala
    1820             1825                 1830

Gln Arg  Leu His Asn Leu Arg  His Asn Leu Ser Ile  Asp Gly Gln
    1835             1840                 1845

Pro Leu  Ser Leu Ser Val Tyr  Ala Thr Pro Ser Glu  Pro Ser Ala
    1850             1855                 1860

Leu Gln  Ser Ala Val Val Asn  Ser Ala Gln Gly Ala  Ala Ala Leu
    1865             1870                 1875

Pro Ala  Ala Val Met Pro Leu  Tyr Ser Phe Pro Val  Met Leu Glu
    1880             1885                 1890

Asn Ala  Arg Gly Met Val Ser  Leu Leu Thr Gly Phe  Gly Asn Thr
    1895             1900                 1905

Leu Leu  Gly Ile Thr Glu Arg  Gln Asp Ala Glu Ala  Leu Ala Lys
    1910             1915                 1920

Leu Leu  Gln Thr Gln Gly Ser  Glu Leu Ile Arg Gln  Gly Leu Arg
    1925             1930                 1935

Gln Gln  Asp Asn Val Leu Glu  Glu Ile Asp Ala Asp  Ile Ala Ala
    1940             1945                 1950
```

Leu Glu Glu Ser Arg Arg Gly Ala Gln Met Arg Phe Glu Arg Tyr
1955   1960   1965

Lys Val Leu Tyr Glu Ala Asp Val Asn Thr Gly Glu Lys Gln Ala
1970   1975   1980

Met Asp Leu Tyr Leu Ser Ser Ser Val Leu Ser Ala Ser Thr Ala
1985   1990   1995

Ala Leu Phe Leu Ala Glu Ala Ala Ala Asp Met Leu Pro Asn Ile
2000   2005   2010

Tyr Gly Leu Ala Val Gly Gly Ser Arg Tyr Gly Ala Leu Phe Lys
2015   2020   2025

Ala Thr Ala Ile Gly Ile Gln Val Ser Ser Asp Ala Thr Arg Ile
2030   2035   2040

Ser Ala Asp Lys Ile Ser Gln Ser Glu Val Tyr Arg Arg Arg Arg
2045   2050   2055

Glu Glu Trp Glu Ile Gln Arg Asp Ser Ala Gln Ser Asp Val Ala
2060   2065   2070

Gln Ile Asp Ala Gln Leu Ala Ala Met Ala Val Arg Arg Glu Gly
2075   2080   2085

Ala Glu Leu Gln Lys Thr Tyr Leu Glu Thr Gln Gln Thr Gln Ala
2090   2095   2100

Gln Ala Gln Leu Ala Phe Leu Gln Ser Lys Phe Asn Asn Thr Ala
2105   2110   2115

Leu Tyr Ser Trp Leu Arg Gly Arg Leu Ser Ala Ile Tyr Tyr Gln
2120   2125   2130

Phe Tyr Asp Leu Ala Val Ser Arg Cys Leu Met Ala Gln Gln Ala
2135   2140   2145

Trp Gln Trp Asp Lys Phe Glu Thr Arg Ser Phe Ile Gln Pro Gly
2150   2155   2160

Ala Trp Met Gly Ala Asn Ala Gly Leu Leu Ala Gly Glu Thr Leu
2165   2170   2175

Met Leu Asn Leu Ala Gln Met Glu Gln Ala Trp Leu Thr Gly Asp
2180   2185   2190

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```
Glu Arg Ala Ile Glu Val Thr Arg Thr Val Cys Leu Ser Glu Val
    2195               2200               2205

Tyr Thr Ser Leu Ala Glu Asp Ala Ala Phe Ser Leu Ala Asp Lys
    2210               2215               2220

Val Val Glu Leu Val Ser Asn Gly Ser Gly Ser Ala Gly Thr Lys
    2225               2230               2235

Ser Asn Gly Leu Gln Met Asp Gln Gln Gln Leu Glu Ala Thr Leu
    2240               2245               2250

Lys Leu Ala Asp Leu Gly Ile Gly Asn Asp Tyr Pro Val Ser Leu
    2255               2260               2265

Gly Thr Met Arg Arg Ile Lys Gln Ile Ser Val Thr Leu Pro Ala
    2270               2275               2280

Leu Val Gly Pro Tyr Gln Asp Val Arg Ala Val Leu Ser Tyr Gly
    2285               2290               2295

Gly Ser Met Val Met Pro Arg Gly Cys Ser Ala Leu Ala Val Ser
    2300               2305               2310

His Gly Met Asn Asp Ser Gly Gln Phe Gln Leu Asp Phe Asn Asp
    2315               2320               2325

Pro Arg Tyr Leu Pro Phe Glu Gly Leu Pro Val Asp Asp Thr Gly
    2330               2335               2340

Thr Leu Thr Leu Ser Phe Pro Asp Ala Asp Gly Lys Gln Gln Ala
    2345               2350               2355

Met Leu Leu Ser Leu Ser Asp Ile Ile Leu His Ile Arg Tyr Thr
    2360               2365               2370

Ile Ile Ser
    2375


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<213>  Serratia entomophila

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Met Gln Asn His Gln Asp Met Ala Ile Thr Ala Pro Thr Leu Pro Ser
1               5               10               15
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Gly Gly Gly Ala Val Thr Gly Leu Lys Gly Asp Ile Ala Ala Ala Gly
            20   25   30

Pro Asp Gly Ala Ala Thr Leu Ser Ile Pro Leu Pro Val Ser Pro Gly
            35   40   45

Arg Gly Tyr Ala Pro Thr Gly Ala Leu Asn Tyr His Ser Arg Ser Gly
        50   55   60

Asn Gly Pro Phe Gly Ile Gly Trp Gly Ile Gly Gly Ala Ala Val Gln
65   70   75   80

Arg Arg Thr Arg Asn Gly Ala Pro Thr Tyr Asp Asp Thr Asp Glu Phe
            85   90   95

Thr Gly Pro Asp Gly Glu Val Leu Val Pro Ala Leu Thr Ala Ala Gly
            100   105   110

Thr Gln Glu Ala Arg Gln Ala Thr Ser Leu Leu Gly Ile Asn Pro Gly
            115   120   125

Gly Ser Phe Asn Val Gln Val Tyr Arg Ser Arg Thr Glu Gly Ser Leu
            130   135   140

Ser Arg Leu Glu Arg Trp Leu Pro Ala Asp Glu Thr Glu Thr Glu Phe
145   150   155   160

Trp Val Leu Tyr Thr Pro Asp Gly Gln Val Ala Leu Leu Gly Arg Asn
            165   170   175

Ala Gln Ala Arg Ile Ser Asn Pro Thr Ala Pro Thr Gln Thr Ala Val
            180   185   190

Trp Leu Met Glu Ser Ser Val Ser Leu Thr Gly Glu Gln Met Tyr Tyr
            195   200   205

Gln Tyr Arg Ala Glu Asp Asp Asp Gly Cys Asp Glu Ala Glu Arg Asp
    210   215   220

Ala His Pro Gln Ala Gly Ala Gln Arg Tyr Pro Val Ala Val Trp Tyr
225   230   235   240

Gly Asn Arg Gln Ala Ala Arg Thr Leu Pro Ala Leu Val Ser Thr Pro
            245   250   255

Ser Met Asp Ser Trp Leu Phe Ile Leu Val Phe Asp Tyr Gly Glu Arg
            260   265   270

Ser Ser Val Leu Ser Glu Ala Pro Ala Trp Gln Thr Pro Gly Ser Gly
        275   280   285

Glu Trp Leu Cys Arg Gln Asp Cys Phe Ser Gly Tyr Glu Phe Gly Phe
    290   295   300

Asn Leu Arg Thr Arg Arg Leu Cys Arg Gln Val Leu Met Phe His Tyr
305   310   315   320

Leu Gly Val Leu Ala Gly Ser Ser Gly Ala Asn Asp Ala Pro Ala Leu
            325   330   335

Ile Ser Arg Leu Leu Leu Asp Tyr Arg Glu Ser Pro Ser Leu Ser Leu
        340   345   350

Leu Glu Asn Val His Gln Val Ala Tyr Glu Ser Asp Gly Thr Ser Cys
        355   360   365

Ala Leu Pro Ala Leu Ala Leu Gly Trp Gln Thr Phe Thr Pro Pro Thr
    370   375   380

Leu Ser Ala Trp Gln Thr Arg Asp Asp Met Gly Lys Leu Ser Leu Leu
385   390   395   400

Gln Pro Tyr Gln Leu Val Asp Leu Asn Gly Glu Gly Val Val Gly Ile
            405   410   415

Leu Tyr Gln Asp Ser Gly Ala Trp Trp Tyr Arg Glu Pro Val Arg Gln
            420   425   430

Ser Gly Asp Asp Pro Asp Ala Val Thr Trp Gly Ala Ala Ala Ala Leu
        435   440   445

Pro Thr Met Pro Ala Leu His Asn Ser Gly Ile Leu Ala Asp Leu Asn
    450   455   460

Gly Asp Gly Arg Leu Glu Trp Val Val Thr Ala Pro Gly Val Ala Gly
465   470   475   480

Met Tyr Asp Arg Thr Pro Gly Arg Asp Trp Leu His Phe Thr Pro Leu
            485   490   495

Ser Ala Leu Pro Val Glu Tyr Ala His Pro Lys Ala Val Leu Ala Asp
        500   505   510

Ile Leu Gly Ala Gly Leu Thr Asp Met Val Leu Ile Gly Pro Arg Ser

```
                515                   520                   525
```

```
Val Arg Leu Tyr Ser Gly Lys Asn Asp Gly Trp Asn Lys Gly Glu Thr
    530               535               540
```

```
Val Gln Gln Thr Glu Arg Leu Thr Leu Pro Val Pro Gly Val Asp Pro
545               550               555               560
```

```
Arg Thr Leu Val Ala Phe Ser Asp Met Ala Gly Ser Gly Gln Gln His
                565               570               575
```

```
Leu Thr Glu Val Arg Ala Asn Gly Val Arg Tyr Trp Pro Asn Leu Gly
                580               585               590
```

```
His Gly Arg Phe Gly Gln Pro Val Asn Ile Pro Gly Phe Ser Gln Ser
            595               600               605
```

```
Val Thr Thr Phe Asn Pro Asp Gln Ile Leu Leu Ala Asp Thr Asp Gly
    610               615               620
```

```
Ser Gly Thr Thr Asp Leu Ile Tyr Ala Met Ser Asp Arg Leu Val Ile
625               630               635               640
```

```
Tyr Phe Asn Gln Ser Gly Asn Tyr Phe Ala Glu Pro His Thr Leu Leu
                645               650               655
```

```
Leu Pro Lys Gly Val Arg Tyr Asp Arg Thr Cys Ser Leu Gln Val Ala
            660               665               670
```

```
Asp Ile Gln Gly Leu Gly Val Pro Ser Leu Leu Leu Thr Val Pro His
            675               680               685
```

```
Val Ala Pro His His Trp Val Cys His Leu Ser Ala Asp Lys Pro Trp
    690               695               700
```

```
Leu Leu Asn Gly Met Asn Asn Met Gly Ala Arg His Ala Leu His
705               710               715               720
```

```
Tyr Arg Ser Ser Val Gln Phe Trp Leu Asp Glu Lys Ala Glu Ala Leu
                725               730               735
```

```
Ala Ala Gly Ser Ser Pro Ala Cys Tyr Leu Pro Phe Thr Leu His Thr
            740               745               750
```

```
Leu Trp Arg Ser Val Val Gln Asp Glu Ile Thr Gly Asn Arg Leu Val
            755               760               765
```

Ser Asp Val Leu Tyr Arg His Gly Val Trp Asp Gly Gln Glu Arg Glu
770   775   780

Phe Arg Gly Phe Gly Phe Val Glu Ile Arg Asp Thr Asp Thr Leu Ala
785   790   795   800

Ser Gln Gly Thr Ala Thr Glu Leu Ser Met Pro Ser Val Ser Arg Asn
              805   810   815

Trp Tyr Ala Thr Gly Val Pro Ala Val Asp Glu Arg Leu Pro Glu Thr
            820   825   830

Tyr Trp Gln Asn Asp Ala Ala Ala Phe Ala Asp Phe Ala Thr Arg Phe
          835   840   845

Thr Val Gly Ser Gly Glu Asp Glu Gln Thr Tyr Thr Pro Asp Asp Ser
    850   855   860

Lys Thr Phe Trp Leu Gln Arg Ala Leu Lys Gly Ile Leu Leu Arg Ser
865   870   875   880

Glu Leu Tyr Gly Ala Asp Gly Ser Ser Gln Ala Asp Ile Pro Tyr Ser
            885   890   895

Val Thr Glu Ser Arg Pro Gln Val Arg Leu Val Glu Ala Asn Gly Asp
            900   905   910

Tyr Pro Val Val Trp Pro Met Gly Ala Glu Ser Arg Thr Ser Val Tyr
          915   920   925

Glu Arg Tyr His Asn Asp Pro Gln Cys Gln Gln Gln Ala Val Leu Leu
    930   935   940

Ser Asp Glu Tyr Gly Phe Pro Leu Arg Gln Val Ser Val Asn Tyr Pro
945   950   955   960

Arg Arg Pro Pro Ser Ala Asp Asn Pro Tyr Pro Ala Ser Leu Pro Ala
              965   970   975

Thr Leu Phe Ala Asn Ser Tyr Asp Glu Gln Gln Gln Ile Leu Arg Leu
            980   985   990

Gly Leu Gln Gln Ser Ser Ala His His Leu Val Ser Leu Ser Glu Gly
    995   1000   1005

His Trp Leu Leu Gly Leu Ala Glu Ala Ser Arg Asp Asp Val Phe
    1010   1015   1020

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Thr Tyr Ser Ala Asp Asn Val Pro Glu Gly Gly Leu Thr Leu Glu
    1025   1030   1035

His Leu Leu Ala Pro Glu Ser Leu Val Ser Asp Ser Gln Val Gly
    1040   1045   1050

Thr Leu Ala Gly Gln Gln Gln Val Trp Tyr Leu Asp Ser Gln Asp
    1055   1060   1065

Val Ala Thr Val Ala Ala Pro Pro Leu Pro Pro Lys Val Ala Phe
    1070   1075   1080

Ile Glu Thr Ala Val Leu Asp Glu Gly Met Val Ser Ser Leu Ala
    1085   1090   1095

Ala Tyr Ile Val Asp Glu His Leu Glu Gln Ala Gly Tyr Arg Gln
    1100   1105   1110

Ser Gly Tyr Leu Phe Pro Arg Gly Arg Glu Ala Glu Gln Ala Leu
    1115   1120   1125

Trp Thr Gln Cys Gln Gly Tyr Val Thr Tyr Ala Gly Ala Glu His
    1130   1135   1140

Phe Trp Leu Pro Leu Ser Phe Arg Asp Ser Met Leu Thr Gly Pro
    1145   1150   1155

Val Thr Val Thr Arg Asp Ala Tyr Asp Cys Val Ile Thr Gln Trp
    1160   1165   1170

Gln Asp Ala Ala Gly Ile Val Thr Thr Ala Asp Tyr Asp Trp Arg
    1175   1180   1185

Phe Leu Thr Pro Val Arg Val Thr Asp Pro Asn Asp Asn Leu Gln
    1190   1195   1200

Ser Val Thr Leu Asp Ala Leu Gly Arg Val Thr Thr Leu Arg Phe
    1205   1210   1215

Trp Gly Thr Glu Asn Gly Ile Ala Thr Gly Tyr Ser Asp Ala Thr
    1220   1225   1230

Leu Ser Val Pro Asp Gly Ala Ala Ala Ala Leu Ala Leu Thr Ala
    1235   1240   1245

Pro Leu Pro Val Ala Gln Cys Leu Val Tyr Val Thr Asp Ser Trp
    1250   1255   1260

Gly Asp Asp Asp Asn Glu Lys Met Pro Pro His Val Val Val Leu
    1265   1270   1275

Ala Thr Asp Arg Tyr Asp Ser Asp Thr Gly Gln Gln Val Arg Gln
    1280   1285   1290

Gln Val Thr Phe Ser Asp Gly Phe Gly Arg Glu Leu Gln Ser Ala
    1295   1300   1305

Thr Arg Gln Ala Glu Gly Asn Ala Trp Gln Arg Gly Arg Asp Gly
    1310   1315   1320

Lys Leu Val Thr Ala Ser Asp Gly Leu Pro Val Thr Val Ala Thr
    1325   1330   1335

Asn Phe Arg Trp Ala Val Thr Gly Arg Ala Glu Tyr Asp Asn Lys
    1340   1345   1350

Gly Leu Pro Val Arg Val Tyr Gln Pro Tyr Phe Leu Asp Ser Trp
    1355   1360   1365

Gln Tyr Val Ser Asp Asp Ser Ala Arg Gln Asp Leu Tyr Ala Asp
    1370   1375   1380

Thr His Phe Tyr Asp Pro Thr Ala Arg Glu Trp Gln Val Ile Thr
    1385   1390   1395

Ala Lys Gly Glu Arg Arg Gln Val Leu Tyr Thr Pro Trp Phe Val
    1400   1405   1410

Val Ser Glu Asp Glu Asn Asp Thr Val Gly Leu Asn Asp Ala Ser
    1415   1420   1425

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Met Ser Thr Ser Leu Phe Ser Ser Thr Pro Ser Val Ala Val Leu Asp
1   5   10   15

Asn Arg Gly Leu Leu Val Arg Glu Leu Gln Tyr Tyr Arg His Pro Asp
        20   25   30

Thr Pro Glu Glu Thr Asp Glu Arg Ile Thr Cys His Gln His Asp Glu
        35   40   45

Arg Gly Ser Leu Ser Gln Ser Ala Asp Pro Arg Leu His Ala Ala Gly
    50   55   60

Leu Thr Asn Phe Thr Tyr Leu Asn Ser Leu Thr Gly Thr Val Leu Gln
65   70   75   80

Ser Val Ser Ala Asp Ala Gly Thr Ser Leu Glu Leu Ser Asp Ala Ala
        85   90   95

Gly Arg Ala Phe Leu Ala Val Thr Gly Ala Gly Thr Glu Asp Ala Val
          100   105   110

Thr Arg Thr Trp Gln Tyr Glu Asp Asp Thr Leu Pro Gly Arg Pro Leu
          115   120   125

Ser Ile Thr Glu Gln Val Thr Gly Glu Ala Ala Gln Ile Thr Glu Arg
      130   135   140

Phe Val Tyr Ala Gly Asn Thr Asp Ala Glu Lys Ile Leu Asn Leu Ala
145   150   155   160

Gly Gln Cys Val Ser His Tyr Asp Thr Ala Gly Leu Val Gln Thr Asp
          165   170   175

Ser Ile Ala Leu Ser Gly Val Pro Leu Ala Val Thr Arg Gln Leu Leu
          180   185   190

Pro Asp Ala Ala Gly Ala Asn Trp Met Gly Glu Asp Ala Ser Ala Trp
          195   200   205

Asn Asp Leu Leu Asp Gly Glu Thr Phe Phe Thr Gln Thr His Ala Asp
      210   215   220

Ala Thr Gly Ala Val Leu Ser Ile Thr Asp Ala Lys Gly Asn Leu Gln
225   230   235   240

Arg Val Ala Tyr Asp Val Ala Gly Leu Leu Ser Gly Ser Trp Leu Thr
          245   250   255

Leu Lys Asp Gly Thr Glu Gln Val Ile Val Ala Ser Leu Thr Tyr Ser
          260   265   270

Ala Ala Gly Lys Lys Leu Arg Glu Glu His Gly Asn Gly Val Val Thr
          275   280   285

Ser Tyr Ile Tyr Glu Pro Glu Thr Gln Arg Leu Thr Gly Ile Lys Thr

Glu Arg Pro Ser Gly His Val Ala Gly Ala Lys Val Leu Gln Asp Leu
305   310   315   320

Arg Tyr Thr Tyr Asp Pro Val Gly Asn Val Leu Ser Val Asn Asn Asp
                325   330   335

Ala Glu Glu Thr Arg Phe Trp Arg Asn Gln Lys Val Val Pro Glu Asn
            340   345   350

Thr Tyr Ile Tyr Asp Ser Leu Tyr Gln Leu Val Ser Ala Thr Gly Arg
        355   360   365

Glu Met Ala Asn Ala Gly Gln Gln Gly Asn Asp Leu Pro Ser Ala Thr
    370   375   380

Ala Pro Leu Pro Thr Asp Ser Ser Ala Tyr Thr Asn Tyr Thr Arg Thr
385   390   395   400

Tyr Arg Tyr Asp Arg Gly Gly Asn Leu Thr Gln Met Arg His Ser Ala
                405   410   415

Pro Ala Thr Asn Asn Asn Tyr Thr Thr Asp Ile Thr Val Ser Asp Arg
            420   425   430

Ser Asn Arg Ala Val Leu Ser Thr Leu Ala Glu Val Pro Ser Asp Val
        435   440   445

Asp Met Leu Phe Ser Ala Gly Gly His Gln Lys His Leu Gln Pro Gly
    450   455   460

Gln Ala Leu Val Trp Thr Pro Arg Gly Glu Leu Gln Lys Val Thr Pro
465   470   475   480

Val Val Arg Asp Gly Gly Ala Asp Asp Ser Glu Ser Tyr Arg Tyr Asp
                485   490   495

Ala Gly Ser Gln Arg Ile Ile Lys Thr Gly Thr Arg Gln Thr Gly Asn
            500   505   510

Asn Val Gln Thr Gln Arg Val Val Tyr Leu Pro Gly Leu Glu Leu Arg
        515   520   525

Ile Met Ala Asn Gly Val Thr Glu Lys Glu Ser Leu Gln Val Ile Thr
    530   535   540

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Val Gly Glu Ala Gly Arg Ala Gln Val Arg Val Leu His Trp Glu Ile
545   550   555   560

Gly Lys Pro Asp Asp Leu Asp Glu Asp Ser Val Arg Tyr Ser Tyr Asp
                565   570   575

Asn Leu Val Gly Ser Ser Gln Leu Glu Leu Asp Arg Glu Gly Tyr Leu
                580   585   590

Ile Ser Glu Glu Glu Phe Tyr Pro Tyr Gly Gly Thr Ala Val Leu Thr
                595   600   605

Ala Arg Ser Glu Val Glu Ala Asp Tyr Lys Thr Ile Arg Tyr Ser Gly
    610   615   620

Lys Glu Arg Asp Ala Thr Gly Leu Asp Tyr Tyr Gly Tyr Arg Tyr Tyr
625   630   635   640

Gln Pro Trp Ala Gly Arg Trp Leu Ser Thr Asp Pro Ala Gly Thr Val
                645   650   655

Asp Gly Leu Asn Leu Phe Arg Met Val Arg Asn Asn Pro Val Thr Leu
                660   665   670

Phe Asp Ser Asn Gly Arg Ile Ser Thr Gly Gln Glu Ala Arg Arg Leu
                675   680   685

Val Gly Glu Ala Phe Val His Pro Leu His Met Pro Val Phe Glu Arg
    690   695   700

Ile Ser Val Glu Arg Lys Ile Ser Met Ser Val Arg Glu Ala Gly Ile
705   710   715   720

Tyr Thr Ile Ser Ala Leu Gly Glu Gly Ala Ala Lys Gly His Asn
                725   730   735

Ile Leu Glu Lys Thr Ile Lys Pro Gly Ser Leu Lys Ala Ile Tyr Gly
                740   745   750

Asp Lys Ala Glu Ser Ile Leu Gly Leu Ala Lys Arg Ser Gly Leu Val
                755   760   765

Gly Arg Val Gly Gln Trp Asp Ala Ser Gly Val Arg Gly Ile Tyr Ala
    770   775   780

His Asn Arg Pro Gly Gly Glu Asp Leu Val Tyr Pro Val Ser Leu Gln
785   790   795   800

Asn Thr Ser Ala Asn Glu Ile Val Asn Ala Trp Ile Lys Phe Lys Ile
            805   810   815

Ile Thr Pro Tyr Thr Gly Asp Tyr Asp Met His Asp Ile Ile Lys Phe
            820   825   830

Ser Asp Gly Lys Gly His Val Pro Thr Ala Glu Ser Ser Glu Glu Arg
            835   840   845

Gly Val Lys Asp Leu Ile Asn Lys Gly Val Ala Glu Val Asp Pro Ser
    850   855   860

Arg Pro Phe Glu Tyr Thr Ala Met Asn Val Ile Arg His Gly Pro Gln
865   870   875   880

Val Asn Phe Val Pro Tyr Met Trp Glu His Glu His Asp Lys Val Val
            885   890   895

Asn Asp Asn Gly Tyr Leu Gly Val Val Ala Ser Pro Gly Pro Phe Pro
            900   905   910

Val Ala Met Val His Gln Gly Glu Trp Thr Val Phe Asp Asn Ser Glu
            915   920   925

Glu Leu Phe Asn Phe Tyr Lys Ser Thr Asn Thr Pro Leu Pro Glu His
    930   935   940

Trp Ser Gln Asp Phe Met Asp Arg Gly Lys Gly Ile Val Ala Thr Pro
945   950   955   960

Arg His Ala Glu Leu Leu Asp Lys Arg Arg Val Met Tyr
            965   970

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1   5   10   15

Gly Phe Asn Cys Leu Thr Asp Ile Ser His Ser Ser Phe Asn Glu Phe
            20   25   30

Arg Gln Gln Val Ser Glu His Leu Ser Trp Ser Glu Thr His Asp Leu
    35   40   45

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Tyr His Asp Ala Gln Gln Ala Gln Lys Asp Asn Arg Leu Tyr Glu Ala
    50   55   60

Arg Ile Leu Lys Arg Ala Asn Pro Gln Leu Gln Asn Ala Val His Leu
65   70   75   80

Ala Ile Leu Ala Pro Asn Ala Glu Leu Ile Gly Tyr Asn Asn Gln Phe
            85   90   95

Ser Gly Arg Ala Ser Gln Tyr Val Ala Pro Gly Thr Val Ser Ser Met
        100   105   110

Phe Ser Pro Ala Ala Tyr Leu Thr Glu Leu Tyr Arg Glu Ala Arg Asn
        115   120   125

Leu His Ala Ser Asp Ser Val Tyr Tyr Leu Asp Thr Arg Arg Pro Asp
    130   135   140

Leu Lys Ser Met Ala Leu Ser Gln Gln Asn Met Asp Ile Glu Leu Ser
145   150   155   160

Thr Leu Ser Leu Ser Asn Glu Leu Leu Leu Glu Ser Ile Lys Thr Glu
            165   170   175

Ser Lys Leu Glu Asn Tyr Thr Lys Val Met Glu Met Leu Ser Thr Phe
        180   185   190

Arg Pro Ser Gly Ala Thr Pro Tyr His Asp Ala Tyr Glu Asn Val Arg
        195   200   205

Glu Val Ile Gln Leu Gln Asp Pro Gly Leu Glu Gln Leu Asn Ala Ser
    210   215   220

Pro Ala Ile Ala Gly Leu Met His Gln Ala Ser Leu Leu Gly Ile Asn
225   230   235   240

Ala Ser Ile Ser Pro Glu Leu Phe Asn Ile Leu Thr Glu Glu Ile Thr
            245   250   255

Glu Gly Asn Ala Glu Glu Leu Tyr Lys Lys Asn Phe Gly Asn Ile Glu
        260   265   270

Pro Ala Ser Leu Ala Met Pro Glu Tyr Leu Lys Arg Tyr Tyr Asn Leu
        275   280   285

Ser Asp Glu Glu Leu Ser Gln Phe Ile Gly Lys Ala Ser Asn Phe Gly
    290   295   300

Gln Gln Glu Tyr Ser Asn Asn Gln Leu Ile Thr Pro Val Val Asn Ser
305   310   315   320

Ser Asp Gly Thr Val Lys Val Tyr Arg Ile Thr Arg Glu Tyr Thr Thr
            325   330   335

Asn Ala Tyr Gln Met Asp Val Glu Leu Phe Pro Phe Gly Gly Glu Asn
            340   345   350

Tyr Arg Leu Asp Tyr Lys Phe Lys Asn Phe Tyr Asn Ala Ser Tyr Leu
            355   360   365

Ser Ile Lys Leu Asn Asp Lys Arg Glu Leu Val Arg Thr Glu Gly Ala
    370   375   380

Pro Gln Val Asn Ile Glu Tyr Ser Ala Asn Ile Thr Leu Asn Thr Ala
385   390   395   400

Asp Ile Ser Gln Pro Phe Glu Ile Gly Leu Thr Arg Val Leu Pro Ser
            405   410   415

Gly Ser Trp Ala Tyr Ala Ala Ala Lys Phe Thr Val Glu Glu Tyr Asn
            420   425   430

Gln Tyr Ser Phe Leu Leu Lys Leu Asn Lys Ala Ile Arg Leu Ser Arg
            435   440   445

Ala Thr Glu Leu Ser Pro Thr Ile Leu Glu Gly Ile Val Arg Ser Val
    450   455   460

Asn Leu Gln Leu Asp Ile Asn Thr Asp Val Leu Gly Lys Val Phe Leu
465   470   475   480

Thr Lys Tyr Tyr Met Gln Arg Tyr Ala Ile His Ala Glu Thr Ala Leu
            485   490   495

Ile Leu Cys Asn Ala Pro Ile Ser Gln Arg Ser Tyr Asp Asn Gln Pro
            500   505   510

Ser Gln Phe Asp Arg Leu Phe Asn Thr Pro Leu Leu Asn Gly Gln Tyr
            515   520   525

Phe Ser Thr Gly Asp Glu Glu Ile Asp Leu Asn Ser Gly Ser Thr Gly
    530   535   540

Asp Trp Arg Lys Thr Ile Leu Lys Arg Ala Phe Asn Ile Asp Asp Val

545   550   555   560

Ser Leu Phe Arg Leu Leu Lys Ile Thr Asp His Asp Asn Lys Asp Gly
            565   570   575

Lys Ile Lys Asn Asn Leu Lys Asn Leu Ser Asn Leu Tyr Ile Gly Lys
            580   585   590

Leu Leu Ala Asp Ile His Gln Leu Thr Ile Asp Glu Leu Asp Leu Leu
            595   600   605

Leu Ile Ala Val Gly Glu Gly Lys Thr Asn Leu Ser Ala Ile Ser Asp
610   615   620

Lys Gln Leu Ala Thr Leu Ile Arg Lys Leu Asn Thr Ile Thr Ser Trp
625   630   635   640

Leu His Thr Gln Lys Trp Ser Val Phe Gln Leu Phe Ile Met Thr Ser
            645   650   655

Thr Ser Tyr Asn Lys Thr Leu Thr Pro Glu Ile Lys Asn Leu Leu Asp
            660   665   670

Thr Val Tyr His Gly Leu Gln Gly Phe Asp Lys Asp Lys Ala Asp Leu
            675   680   685

Leu His Val Met Ala Pro Tyr Ile Ala Ala Thr Leu Gln Leu Ser Ser
            690   695   700

Glu Asn Val Ala His Ser Val Leu Leu Trp Ala Asp Lys Leu Gln Pro
705   710   715   720

Gly Asp Gly Ala Met Thr Ala Glu Lys Phe Trp Asp Trp Leu Asn Thr
            725   730   735

Lys Tyr Thr Pro Gly Ser Ser Glu Ala Val Glu Thr Gln Glu His Ile
            740   745   750

Val Gln Tyr Cys Gln Ala Leu Ala Gln Leu Glu Met Val Tyr His Ser
            755   760   765

Thr Gly Ile Asn Glu Asn Ala Phe Arg Leu Phe Val Thr Lys Pro Glu
770   775   780

Met Phe Gly Ala Ala Thr Gly Ala Ala Pro Ala His Asp Ala Leu Ser
785   790   795   800

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Leu Ile Met Leu Thr Arg Phe Ala Asp Trp Val Asn Ala Leu Gly Glu
            805   810   815

Lys Ala Ser Ser Val Leu Ala Ala Phe Glu Ala Asn Ser Leu Thr Ala
            820   825   830

Glu Gln Leu Ala Asp Ala Met Asn Leu Asp Ala Asn Leu Leu Leu Gln
            835   840   845

Ala Ser Ile Gln Ala Gln Asn His Gln His Leu Pro Pro Val Thr Pro
    850   855   860

Glu Asn Ala Phe Ser Cys Trp Thr Ser Ile Asn Thr Ile Leu Gln Trp
865   870   875   880

Val Asn Val Ala Gln Gln Leu Asn Val Ala Pro Gln Gly Val Ser Ala
            885   890   895

Leu Val Gly Leu Asp Tyr Ile Gln Ser Met Lys Glu Thr Pro Thr Tyr
            900   905   910

Ala Gln Trp Glu Asn Ala Ala Gly Val Leu Thr Ala Gly Leu Asn Ser
    915   920   925

Gln Gln Ala Asn Thr Leu His Ala Phe Leu Asp Glu Ser Arg Ser Ala
    930   935   940

Ala Leu Ser Thr Tyr Tyr Ile Arg Gln Val Ala Lys Ala Ala Ala Ala
945   950   955   960

Ile Lys Ser Arg Asp Asp Leu Tyr Gln Tyr Leu Leu Ile Asp Asn Gln
            965   970   975

Val Ser Ala Ala Ile Lys Thr Thr Arg Ile Ala Glu Ala Ile Ala Ser
            980   985   990

Ile Gln Leu Tyr Val Asn Arg Ala Leu Glu Asn Val Glu Glu Asn Ala
            995   1000   1005

Asn Ser Gly Val Ile Ser Arg Gln Phe Phe Ile Asp Trp Asp Lys
    1010   1015   1020

Tyr Asn Lys Arg Tyr Ser Thr Trp Ala Gly Val Ser Gln Leu Val
    1025   1030   1035

Tyr Tyr Pro Glu Asn Tyr Ile Asp Pro Thr Met Arg Ile Gly Gln
    1040   1045   1050

Thr Lys Met Met Asp Ala Leu Leu Gln Ser Val Ser Gln Ser Gln
    1055   1060   1065

Leu Asn Ala Asp Thr Val Glu Asp Ala Phe Met Ser Tyr Leu Thr
    1070   1075   1080

Ser Phe Glu Gln Val Ala Asn Leu Lys Val Ile Ser Ala Tyr His
    1085   1090   1095

Asp Asn Ile Asn Asn Asp Gln Gly Leu Thr Tyr Phe Ile Gly Leu
    1100   1105   1110

Ser Glu Thr Asp Ala Gly Glu Tyr Tyr Trp Arg Ser Val Asp His
    1115   1120   1125

Ser Lys Phe Asn Asp Gly Lys Phe Ala Ala Asn Ala Trp Ser Glu
    1130   1135   1140

Trp His Lys Ile Asp Cys Pro Ile Asn Pro Tyr Lys Ser Thr Ile
    1145   1150   1155

Arg Pro Val Ile Tyr Lys Ser Arg Leu Tyr Leu Leu Trp Leu Glu
    1160   1165   1170

Gln Lys Glu Ile Thr Lys Gln Thr Gly Asn Ser Lys Asp Gly Tyr
    1175   1180   1185

Gln Thr Glu Thr Asp Tyr Arg Tyr Glu Leu Lys Leu Ala His Ile
    1190   1195   1200

Arg Tyr Asp Gly Thr Trp Asn Thr Pro Ile Thr Phe Asp Val Asn
    1205   1210   1215

Lys Lys Ile Ser Glu Leu Lys Leu Glu Lys Asn Arg Ala Pro Gly
    1220   1225   1230

Leu Tyr Cys Ala Gly Tyr Gln Gly Glu Asp Thr Leu Leu Val Met
    1235   1240   1245

Phe Tyr Asn Gln Gln Asp Thr Leu Asp Ser Tyr Lys Asn Ala Ser
    1250   1255   1260

Met Gln Gly Leu Tyr Ile Phe Ala Asp Met Ala Ser Lys Asp Met
    1265   1270   1275

Thr Pro Glu Gln Ser Asn Val Tyr Arg Asp Asn Ser Tyr Gln Gln
    1280   1285   1290

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Phe Asp Thr Asn Asn Val Arg Arg Val Asn Asn Arg Tyr Ala Glu
    1295   1300   1305

Asp Tyr Glu Ile Pro Ser Ser Val Ser Ser Arg Lys Asp Tyr Gly
    1310   1315   1320

Trp Gly Asp Tyr Tyr Leu Ser Met Val Tyr Asn Gly Asp Ile Pro
    1325   1330   1335

Thr Ile Asn Tyr Lys Ala Ala Ser Ser Asp Leu Lys Ile Tyr Ile
    1340   1345   1350

Ser Pro Lys Leu Arg Ile Ile His Asn Gly Tyr Glu Gly Gln Lys
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Arg Asn Gln Cys Asn Leu Met Asn Lys Tyr Gly Lys Leu Gly Asp
    1370   1375   1380

Lys Phe Ile Val Tyr Thr Ser Leu Gly Val Asn Pro Asn Asn Ser
    1385   1390   1395

Ser Asn Lys Leu Met Phe Tyr Pro Val Tyr Gln Tyr Ser Gly Asn
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Thr Ser Gly Leu Asn Gln Gly Arg Leu Leu Phe His Arg Asp Thr
    1415   1420   1425

Thr Tyr Pro Ser Lys Val Glu Ala Trp Ile Pro Gly Ala Lys Arg
    1430   1435   1440

Ser Leu Thr Asn Gln Asn Ala Ala Ile Gly Asp Asp Tyr Ala Thr
    1445   1450   1455

Asp Ser Leu Asn Lys Pro Asp Asp Leu Lys Gln Tyr Ile Phe Met
    1460   1465   1470

Thr Asp Ser Lys Gly Thr Ala Thr Asp Val Ser Gly Pro Val Glu
    1475   1480   1485

Ile Asn Thr Ala Ile Ser Pro Ala Lys Val Gln Ile Ile Val Lys
    1490   1495   1500

Ala Gly Gly Lys Glu Gln Thr Phe Thr Ala Asp Lys Asp Val Ser
    1505   1510   1515

Ile Gln Pro Ser Pro Ser Phe Asp Glu Met Asn Tyr Gln Phe Asn
                            Page 38

Ala Leu Glu Ile Asp Gly Ser Gly Leu Asn Phe Ile Asn Asn Ser
1535   1540   1545

Ala Ser Ile Asp Val Thr Phe Thr Ala Phe Ala Glu Asp Gly Arg
1550   1555   1560

Lys Leu Gly Tyr Glu Ser Phe Ser Ile Pro Val Thr Leu Lys Val
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Ser Thr Asp Asn Ala Leu Thr Leu His His Asn Glu Asn Gly Ala
1580   1585   1590

Gln Tyr Met Gln Trp Gln Ser Tyr Arg Thr Arg Leu Asn Thr Leu
1595   1600   1605

Phe Ala Arg Gln Leu Val Ala Arg Ala Thr Thr Gly Ile Asp Thr
1610   1615   1620

Ile Leu Ser Met Glu Thr Gln Asn Ile Gln Glu Pro Gln Leu Gly
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Lys Gly Phe Tyr Ala Thr Phe Val Ile Pro Pro Tyr Asn Leu Ser
1640   1645   1650

Thr His Gly Asp Glu Arg Trp Phe Lys Leu Tyr Ile Lys His Val
1655   1660   1665

Val Asp Asn Asn Ser His Ile Ile Tyr Ser Gly Gln Leu Thr Asp
1670   1675   1680

Thr Asn Ile Asn Ile Thr Leu Phe Ile Pro Leu Asp Asp Val Pro
1685   1690   1695

Leu Asn Gln Asp Tyr His Ala Lys Val Tyr Met Thr Phe Lys Lys
1700   1705   1710

Ser Pro Ser Asp Gly Thr Trp Trp Gly Pro His Phe Val Arg Asp
1715   1720   1725

Asp Lys Gly Ile Val Thr Ile Asn Pro Lys Ser Ile Leu Thr His
1730   1735   1740

Phe Glu Ser Val Asn Val Leu Asn Asn Ile Ser Ser Glu Pro Met
1745   1750   1755

Asp Phe Ser Gly Ala Asn Ser Leu Tyr Phe Trp Glu Leu Phe Tyr
    1760   1765   1770

Tyr Thr Pro Met Leu Val Ala Gln Arg Leu Leu His Glu Gln Asn
    1775   1780   1785

Phe Asp Glu Ala Asn Arg Trp Leu Lys Tyr Val Trp Ser Pro Ser
    1790   1795   1800

Gly Tyr Ile Val His Gly Gln Ile Gln Asn Tyr Gln Trp Asn Val
    1805   1810   1815

Arg Pro Leu Leu Glu Asp Thr Ser Trp Asn Ser Asp Pro Leu Asp
    1820   1825   1830

Ser Val Asp Pro Asp Ala Val Ala Gln His Asp Pro Met His Tyr
    1835   1840   1845

Lys Val Ser Thr Phe Met Arg Thr Leu Asp Leu Leu Ile Ala Arg
    1850   1855   1860

Gly Asp His Ala Tyr Arg Gln Leu Glu Arg Asp Thr Leu Asn Glu
    1865   1870   1875

Ala Lys Met Trp Tyr Met Gln Ala Leu His Leu Leu Gly Asp Lys
    1880   1885   1890

Pro Tyr Leu Pro Leu Ser Thr Thr Trp Ser Asp Pro Arg Leu Asp
    1895   1900   1905

Arg Ala Ala Asp Ile Thr Thr Gln Asn Ala His Asp Ser Ala Ile
    1910   1915   1920

Val Ala Leu Arg Gln Asn Ile Pro Thr Pro Ala Pro Leu Ser Leu
    1925   1930   1935

Arg Ser Ala Asn Thr Leu Thr Asp Leu Phe Leu Pro Gln Ile Asn
    1940   1945   1950

Glu Val Met Met Asn Tyr Trp Gln Thr Leu Ala Gln Arg Val Tyr
    1955   1960   1965

Asn Leu Arg His Asn Leu Ser Ile Asp Gly Gln Pro Leu Tyr Leu
    1970   1975   1980

Pro Ile Tyr Ala Thr Pro Ala Asp Pro Lys Ala Leu Leu Ser Ala
    1985   1990   1995

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Ala Val  Ala Thr Ser Gln Gly  Gly Gly Lys Leu Pro  Glu Ser Phe
    2000             2005                 2010

Met Ser  Leu Trp Arg Phe Pro  His Met Leu Glu Asn  Ala Arg Gly
    2015             2020                 2025

Met Val  Ser Gln Leu Thr Gln  Phe Gly Ser Thr Leu  Gln Asn Ile
    2030             2035                 2040

Ile Glu  Arg Gln Asp Ala Glu  Ala Leu Asn Ala Leu  Leu Gln Asn
    2045             2050                 2055

Gln Ala  Ala Glu Leu Ile Leu  Thr Asn Leu Ser Ile  Gln Asp Lys
    2060             2065                 2070

Thr Ile  Glu Glu Leu Asp Ala  Glu Lys Thr Val Leu  Glu Lys Ser
    2075             2080                 2085

Lys Ala  Gly Ala Gln Ser Arg  Phe Asp Ser Tyr Gly  Lys Leu Tyr
    2090             2095                 2100

Asp Glu  Asn Ile Asn Ala Gly  Glu Asn Gln Ala Met  Thr Leu Arg
    2105             2110                 2115

Ala Ser  Ala Ala Gly Leu Thr  Thr Ala Val Gln Ala  Ser Arg Leu
    2120             2125                 2130

Ala Gly  Ala Ala Ala Asp Leu  Val Pro Asn Ile Phe  Gly Phe Ala
    2135             2140                 2145

Gly Gly  Gly Ser Arg Trp Gly  Ala Ile Ala Glu Ala  Thr Gly Tyr
    2150             2155                 2160

Val Met  Glu Phe Ser Ala Asn  Val Met Asn Thr Glu  Ala Asp Lys
    2165             2170                 2175

Ile Ser  Gln Ser Glu Thr Tyr  Arg Arg Arg Arg Gln  Glu Trp Glu
    2180             2185                 2190

Ile Gln  Arg Asn Asn Ala Glu  Ala Glu Leu Lys Gln  Ile Asp Ala
    2195             2200                 2205

Gln Leu  Lys Ser Leu Ala Val  Arg Arg Glu Ala Ala  Val Leu Gln
    2210             2215                 2220

Lys Thr  Ser Leu Lys Thr Gln  Gln Glu Gln Thr Gln  Ser Gln Leu
    2225             2230                 2235
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Ala Phe Leu Gln Arg Lys Phe Ser Asn Gln Ala Leu Tyr Asn Trp
    2240   2245   2250

Leu Arg Gly Arg Leu Ala Ala Ile Tyr Phe Gln Phe Tyr Asp Leu
    2255   2260   2265

Ala Val Ala Arg Cys Leu Met Ala Glu Gln Ala Tyr Arg Trp Glu
    2270   2275   2280

Leu Asn Asp Asp Ser Ala Arg Phe Ile Lys Pro Gly Ala Trp Gln
    2285   2290   2295

Gly Thr Tyr Ala Gly Leu Leu Ala Gly Glu Thr Leu Met Leu Ser
    2300   2305   2310

Leu Ala Gln Met Glu Asp Ala His Leu Lys Arg Asp Lys Arg Ala
    2315   2320   2325

Leu Glu Val Glu Arg Thr Val Ser Leu Ala Glu Val Tyr Ala Gly
    2330   2335   2340

Leu Pro Lys Asp Asn Gly Pro Phe Ser Leu Ala Gln Glu Ile Asp
    2345   2350   2355

Lys Leu Val Ser Gln Gly Ser Gly Ser Ala Gly Ser Gly Asn Asn
    2360   2365   2370

Asn Leu Ala Phe Gly Ala Gly Thr Asp Thr Lys Thr Ser Leu Gln
    2375   2380   2385

Ala Ser Val Ser Phe Ala Asp Leu Lys Ile Arg Glu Asp Tyr Pro
    2390   2395   2400

Ala Ser Leu Gly Lys Ile Arg Arg Ile Lys Gln Ile Ser Val Thr
    2405   2410   2415

Leu Pro Ala Leu Leu Gly Pro Tyr Gln Asp Val Gln Ala Ile Leu
    2420   2425   2430

Ser Tyr Gly Asp Lys Ala Gly Leu Ala Asn Gly Cys Glu Ala Leu
    2435   2440   2445

Ala Val Ser His Gly Met Asn Asp Ser Gly Gln Phe Gln Leu Asp
    2450   2455   2460

Phe Asn Asp Gly Lys Phe Leu Pro Phe Glu Gly Ile Ala Ile Asp

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                             2465                    2470                     2475
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Gln Gly  Thr Leu Thr Leu Ser  Phe Pro Asn Ala Ser  Met Pro Glu
    2480                2485                2490
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Lys Gly  Lys Gln Ala Thr Met  Leu Lys Thr Leu Asn  Asp Ile Ile
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Leu His  Ile Arg Tyr Thr Ile  Lys
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Ala Leu Val Ala His Tyr Ile Ala Thr Gln Val Pro Ala Asp Leu Lys
            20                  25                  30
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Glu Ser Ile Gln Thr Ala Asp Asp Leu Tyr Glu Tyr Leu Leu Leu Asp
        35                  40                  45
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Thr Lys Ile Ser Asp Leu Val Thr Thr Ser Pro Leu Ser Glu Ala Ile
    50                  55                  60
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Gly Ser Leu Gln Leu Phe Ile His Arg Ala Ile Glu Gly Tyr Asp Gly
65                  70                  75                  80
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Thr Leu Ala Asp Ser Ala Lys Pro Tyr Phe Ala Asp Glu Gln Phe Leu
                85                  90                  95
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Tyr Asn Trp Asp Ser Phe Asn His Arg Tyr Ser Thr Trp Ala Gly Lys
                100                 105                 110
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Glu Arg Leu Lys Phe Tyr Ala Gly Asp Tyr Ile Asp Pro Thr Leu Arg
            115                 120                 125
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Leu Asn Lys Thr Glu Ile Phe Thr Ala Phe Glu Gln Gly Ile Ser Gln
    130                 135                 140
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Gly Lys Leu Lys Ser Glu Leu Val Glu Ser Lys Leu Arg Asp Tyr Leu
145                 150                 155                 160
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Ile Ser Tyr Asp Thr Leu Ala Thr Leu Asp Tyr Ile Thr Ala Cys Gln
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Gly Lys Asp Asn Lys Thr Ile Phe Phe Ile Gly Arg Thr Gln Asn Ala
            180   185   190

Pro Tyr Ala Phe Tyr Trp Arg Lys Leu Thr Leu Val Thr Asp Gly Gly
            195   200   205

Lys Leu Lys Pro Asp Gln Trp Ser Glu Trp Arg Ala Ile Asn Ala Gly
    210   215   220

Ile Ser Glu Ala Tyr Ser Gly His Val Glu Pro Phe Trp Glu Asn Asn
225   230   235   240

Lys Leu His Ile Arg Trp Phe Thr Ile Ser Lys Glu Asp Lys Ile Asp
                245   250   255

Phe Val Tyr Lys Asn Ile Trp Val Met Ser Ser Asp Tyr Ser Trp Ala
            260   265   270

Ser Lys Lys Lys Ile Leu Glu Leu Ser Phe Thr Asp Tyr Asn Arg Val
            275   280   285

Gly Ala Thr Gly Ser Ser Ser Pro Thr Glu Val Ala Ser Gln Tyr Gly
    290   295   300

Ser Asp Ala Gln Met Asn Ile Ser Asp Asp Gly Thr Val Leu Ile Phe
305   310   315   320

Gln Asn Ala Gly Gly Ala Thr Pro Ser Thr Gly Val Thr Leu Cys Tyr
            325   330   335

Asp Ser Gly Asn Val Ile Lys Asn Leu Ser Ser Thr Gly Ser Ala Asn
            340   345   350

Leu Ser Ser Lys Asp Tyr Ala Thr Thr Lys Leu Arg Met Cys His Gly
    355   360   365

Gln Ser Tyr Asn Asp Asn Asn Tyr Cys Asn Phe Thr Leu Ser Ile Asn
    370   375   380

Thr Ile Glu Phe Thr Ser Tyr Gly Thr Phe Ser Ser Asp Gly Lys Gln
385   390   395   400

Phe Thr Pro Pro Ser Gly Ser Ala Ile Asp Leu His Leu Pro Asn Tyr
            405   410   415

Val Asp Leu Asn Ala Leu Leu Asp Ile Ser Leu Asp Ser Leu Leu Asn
        420   425   430

Tyr Asp Val Gln Gly Gln Phe Gly Gly Ser Asn Pro Val Asp Asn Phe
        435   440   445

Ser Gly Pro Tyr Gly Ile Tyr Leu Trp Glu Ile Phe Phe His Ile Pro
        450   455   460

Phe Leu Val Thr Val Arg Met Gln Thr Glu Gln Arg Tyr Glu Asp Ala
465   470   475   480

Asp Thr Trp Tyr Lys Tyr Ile Phe Arg Ser Ala Gly Tyr Arg Asp Ala
         485   490   495

Asn Gly Gln Leu Ile Met Asp Gly Ser Lys Pro Arg Tyr Trp Asn Val
        500   505   510

Met Pro Leu Gln Leu Asp Thr Ala Trp Asp Thr Thr Gln Pro Ala Thr
        515   520   525

Thr Asp Pro Asp Val Ile Ala Met Ala Asp Pro Met His Tyr Lys Leu
        530   535   540

Ala Ile Phe Leu His Thr Leu Asp Leu Leu Ile Ala Arg Gly Asp Ser
545   550   555   560

Ala Tyr Arg Gln Leu Glu Arg Asp Thr Leu Val Glu Ala Lys Met Tyr
        565   570   575

Tyr Ile Gln Ala Gln Gln Leu Leu Gly Pro Arg Pro Asp Ile His Thr
        580   585   590

Thr Asn Thr Trp Pro Asn Pro Thr Leu Ser Lys Glu Ala Gly Ala Ile
        595   600   605

Ala Thr Pro Thr Phe Leu Ser Ser Pro Glu Val Met Thr Phe Ala Ala
        610   615   620

Trp Leu Ser Ala Gly Asp Thr Ala Asn Ile Gly Asp Gly Asp Phe Leu
625   630   635   640

Pro Pro Tyr Asn Asp Val Leu Leu Gly Tyr Trp Asp Lys Leu Glu Leu
        645   650   655

Arg Leu Tyr Asn Leu Arg His Asn Leu Ser Leu Asp Gly Gln Pro Leu
        660   665   670

Asn Leu Pro Leu Tyr Ala Thr Pro Val Asp Pro Lys Thr Leu Gln Arg
        675   680   685

Gln Gln Ala Gly Gly Asp Gly Thr Gly Ser Ser Pro Ala Gly Gly Gln
        690   695   700

Gly Ser Val Gln Gly Trp Arg Tyr Pro Leu Leu Val Glu Arg Ala Arg
705   710   715   720

Ser Ala Val Ser Leu Leu Thr Gln Phe Gly Asn Ser Leu Gln Thr Thr
            725   730   735

Leu Glu His Gln Asp Asn Glu Lys Met Thr Leu Leu Leu Gln Thr Gln
            740   745   750

Gln Gln Ala Ile Leu Lys Gln Gln His Asp Ile Gln Gln Asn Asn Leu
        755   760   765

Lys Gly Leu Gln His Ser Leu Thr Ala Leu Gln Ala Ser Arg Asp Gly
    770   775   780

Ala Thr Leu Arg Gln Lys His Tyr Ser Asp Leu Ile Asn Gly Gly Leu
785   790   795   800

Ser Ala Ala Glu Ile Ala Gly Leu Thr Leu Arg Ser Thr Ala Met Ile
            805   810   815

Thr Asn Gly Val Ala Thr Gly Leu Leu Ile Ala Gly Gly Ile Ala Asn
            820   825   830

Ala Val Pro Asn Val Phe Gly Leu Ala Asn Gly Gly Ser Glu Trp Gly
        835   840   845

Ala Pro Leu Ile Gly Ser Gly Gln Ala Thr Gln Val Gly Ala Gly Ile
    850   855   860

Gln Asp Gln Ser Ala Gly Ile Ser Glu Val Thr Ala Gly Tyr Gln Arg
865   870   875   880

Arg Gln Glu Glu Trp Ala Leu Gln Arg Asp Ile Ala Asp Asn Glu Ile
            885   890   895

Thr Gln Leu Asp Ala Gln Ile Gln Ser Leu Gln Glu Gln Ile Thr Met
        900   905   910

Ala Gln Lys Gln Ile Thr Leu Ser Glu Thr Glu Gln Ala Asn Ala Gln
        915   920   925

Ala Ile Tyr Asp Leu Gln Thr Thr Arg Phe Thr Gly Gln Ala Leu Tyr
    930   935   940

Asn Trp Met Ala Gly Arg Leu Ser Ala Leu Tyr Tyr Gln Met Tyr Asp
945   950   955   960

Ser Thr Leu Pro Ile Cys Leu Gln Ala Lys Ala Ala Leu Val Gln Glu
                965   970   975

Leu Gly Glu Lys Glu Ser Asp Ser Leu Phe Gln Val Pro Val Trp Asn
                980   985   990

Asp Leu Trp Gln Gly Leu Leu Ala Gly Glu Gly Leu Ser Ser Glu Leu
        995   1000   1005

Gln Lys Leu Asp Ala Ile Trp Leu Ala Arg Gly Gly Ile Gly Leu
    1010   1015   1020

Glu Ala Ile Arg Thr Val Ser Leu Asp Thr Leu Phe Gly Thr Gly
    1025   1030   1035

Thr Leu Ser Glu Asn Ile Asn Lys Val Leu Asn Gly Glu Thr Val
    1040   1045   1050

Ser Pro Ser Gly Gly Val Thr Leu Ala Leu Thr Gly Asp Ile Phe
    1055   1060   1065

Gln Ala Thr Leu Asp Leu Ser Gln Leu Gly Leu Asp Asn Ser Tyr
    1070   1075   1080

Asn Leu Gly Asn Glu Lys Lys Arg Arg Ile Lys Arg Ile Ala Val
    1085   1090   1095

Thr Leu Pro Thr Leu Leu Gly Pro Tyr Gln Asp Leu Glu Ala Thr
    1100   1105   1110

Leu Val Met Gly Ala Glu Ile Ala Ala Leu Ser His Gly Val Asn
    1115   1120   1125

Asp Gly Gly Arg Phe Val Thr Asp Phe Asn Asp Ser Arg Phe Leu
    1130   1135   1140

Pro Phe Glu Gly Arg Asp Ala Thr Thr Gly Thr Leu Glu Leu Asn
    1145   1150   1155

Ile Phe His Ala Gly Lys Glu Gly Thr Gln His Glu Leu Val Ala

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                                     1160                1165                     1170

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Ile Val Ile Gly Gly Asp Thr Asp Thr Arg Val Thr Arg His Gln Tyr
        35                  40                  45


Asp Ala Arg Gly His Leu Asn Tyr Ser Ile Asp Pro Arg Leu Tyr Asp
    50                  55                  60


Ala Lys Gln Ala Asp Asn Ser Val Lys Pro Asn Phe Val Trp Gln His
65                  70                  75                  80


Asp Leu Ala Gly His Ala Leu Arg Thr Glu Ser Val Asp Ala Gly Arg
                85                  90                  95


Thr Val Ala Leu Asn Asp Ile Glu Gly Arg Ser Val Met Thr Met Asn
            100                 105                 110


Ala Thr Gly Val Arg Gln Thr Arg Arg Tyr Glu Gly Asn Thr Leu Pro
            115                 120                 125


Gly Arg Leu Leu Ser Val Ser Glu Gln Val Phe Asn Gln Glu Ser Ala
    130                 135                 140


Lys Val Thr Glu Arg Phe Ile Trp Ala Gly Asn Thr Thr Ser Glu Lys
145                 150                 155                 160


Glu Tyr Asn Leu Ser Gly Leu Cys Ile Arg His Tyr Asp Thr Ala Gly
                165                 170                 175


Val Thr Arg Leu Met Ser Gln Ser Leu Ala Gly Ala Met Leu Ser Gln
                            Page 48
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                              180   185   190

Ser His Gln Leu Leu Ala Glu Gly Gln Glu Ala Asn Trp Ser Gly Asp
        195   200   205

Asp Glu Thr Val Trp Gln Gly Met Leu Ala Ser Glu Val Tyr Thr Thr
    210   215   220

Gln Ser Thr Thr Asn Ala Ile Gly Ala Leu Leu Thr Gln Thr Asp Ala
225   230   235   240

Lys Gly Asn Ile Gln Arg Leu Ala Tyr Asp Ile Ala Gly Gln Leu Lys
                245   250   255

Gly Ser Trp Leu Thr Val Lys Gly Gln Ser Glu Gln Val Ile Val Lys
            260   265   270

Ser Leu Ser Trp Ser Ala Ala Gly His Lys Leu Arg Glu Glu His Gly
        275   280   285

Asn Gly Val Val Thr Glu Tyr Ser Tyr Glu Pro Glu Thr Gln Arg Leu
    290   295   300

Ile Gly Ile Thr Thr Arg Arg Ala Glu Gly Ser Gln Ser Gly Ala Arg
305   310   315   320

Val Leu Gln Asp Leu Arg Tyr Lys Tyr Asp Pro Val Gly Asn Val Ile
                325   330   335

Ser Ile His Asn Asp Ala Glu Ala Thr Arg Phe Trp Arg Asn Gln Lys
            340   345   350

Val Glu Pro Glu Asn Arg Tyr Val Tyr Asp Ser Leu Tyr Gln Leu Met
        355   360   365

Ser Ala Thr Gly Arg Glu Met Ala Asn Ile Gly Gln Gln Ser Asn Gln
    370   375   380

Leu Pro Ser Pro Val Ile Pro Val Pro Thr Asp Asp Ser Thr Tyr Thr
385   390   395   400

Asn Tyr Leu Arg Thr Tyr Thr Tyr Asp Arg Gly Gly Asn Leu Val Gln
                405   410   415

Ile Arg His Ser Ser Pro Ala Thr Gln Asn Ser Tyr Thr Thr Asp Ile
            420   425   430

Thr Val Ser Ser Arg Ser Asn Arg Ala Val Leu Ser Thr Leu Thr Thr
435   440   445

Asp Pro Thr Arg Val Asp Ala Leu Phe Asp Ser Gly Gly His Gln Lys
450   455   460

Met Leu Ile Pro Gly Gln Asn Leu Asp Trp Asn Ile Arg Gly Glu Leu
465   470   475   480

Gln Arg Val Thr Pro Val Ser Arg Glu Asn Ser Ser Asp Ser Glu Trp
485   490   495

Tyr Arg Tyr Ser Ser Asp Gly Met Arg Leu Leu Lys Val Ser Glu Gln
500   505   510

Gln Thr Gly Asn Ser Thr Gln Val Gln Arg Val Thr Tyr Leu Pro Gly
515   520   525

Leu Glu Leu Arg Thr Thr Gly Val Ala Asp Lys Thr Thr Glu Asp Leu
530   535   540

Gln Val Ile Thr Val Gly Glu Ala Gly Arg Ala Gln Val Arg Val Leu
545   550   555   560

His Trp Glu Ser Gly Lys Pro Thr Asp Ile Asp Asn Asn Gln Val Arg
565   570   575

Tyr Ser Tyr Asp Asn Leu Leu Gly Ser Ser Gln Leu Glu Leu Asp Ser
580   585   590

Glu Gly Gln Ile Leu Ser Gln Glu Glu Tyr Tyr Pro Tyr Gly Gly Thr
595   600   605

Ala Ile Trp Ala Ala Arg Asn Gln Thr Glu Ala Ser Tyr Lys Phe Ile
610   615   620

Arg Tyr Ser Gly Lys Glu Arg Asp Ala Thr Gly Leu Tyr Tyr Tyr Gly
625   630   635   640

Tyr Arg Tyr Tyr Gln Pro Trp Val Gly Arg Trp Leu Ser Ala Asp Pro
645   650   655

Ala Gly Thr Val Asp Gly Leu Asn Leu Tyr Arg Met Val Arg Asn Asn
660   665   670

Pro Ile Thr Leu Thr Asp His Asp Gly Leu Ala Pro Ser Pro Asn Arg
675   680   685

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Asn Arg Asn Thr Phe Trp Phe Ala Ser Phe Leu Phe Arg Lys Pro Asp
    690   695   700

Glu Gly Met Ser Ala Ser Met Arg Arg Gly Gln Lys Ile Gly Arg Ala
705   710   715   720

Ile Ala Gly Gly Ile Ala Ile Gly Gly Leu Ala Ala Thr Ile Ala Ala
                725   730   735

Thr Ala Gly Ala Ala Ile Pro Val Ile Leu Gly Val Ala Ala Val Gly
            740   745   750

Ala Gly Ile Gly Ala Leu Met Gly Tyr Asn Val Gly Ser Leu Leu Glu
            755   760   765

Lys Gly Gly Ala Leu Leu Ala Arg Leu Val Gln Gly Lys Ser Thr Leu
    770   775   780

Val Gln Ser Ala Ala Gly Ala Ala Ala Gly Ala Ser Ser Ala Ala Ala
785   790   795   800

Tyr Gly Ala Arg Ala Gln Gly Val Gly Val Ala Ser Ala Ala Gly Ala
            805   810   815

Val Thr Gly Ala Val Gly Ser Trp Ile Asn Asn Ala Asp Arg Gly Ile
            820   825   830

Gly Gly Ala Ile Gly Ala Gly Ser Ala Val Gly Thr Ile Asp Thr Met
            835   840   845

Leu Gly Thr Ala Ser Thr Leu Thr His Glu Val Gly Ala Ala Ala Gly
    850   855   860

Gly Ala Ala Gly Gly Met Ile Thr Gly Thr Gln Gly Ser Thr Arg Ala
865   870   875   880

Gly Ile His Ala Gly Ile Gly Thr Tyr Tyr Gly Ser Trp Ile Gly Phe
            885   890   895

Gly Leu Asp Val Ala Ser Asn Pro Ala Gly His Leu Ala Asn Tyr Ala
            900   905   910

Val Gly Tyr Ala Ala Gly Leu Gly Ala Glu Met Ala Val Asn Arg Ile
    915   920   925

Met Gly Gly Gly Phe Leu Ser Arg Leu Leu Gly Arg Val Val Ser Pro
    930   935   940

Tyr Ala Ala Gly Leu Ala Arg Gln Leu Val His Phe Ser Val Ala Arg
945   950   955   960

Pro Val Phe Glu Pro Ile Phe Ser Val Leu Gly Gly Leu Val Gly Gly
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Ile Gly Thr Gly Leu His Arg Val Met Gly Arg Glu Ser Trp Ile Ser
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Arg Ala Leu Ser Ala Ala Gly Ser Gly Ile Asp His Val Ala Gly Met
        995   1000   1005

Ile Gly Asn Gln Ile Arg Gly Arg Val Leu Thr Thr Thr Gly Ile
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